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ABSTRACT

This booklet of teaching suggestions, obtained during a 1-day brainstorming session with 12 North Dakota Vocational teachers, is based on a research project which sought to identify the concepts and instruction that are common in secondary vocational courses. Following a brief summary of the research project, which includes the procedures and resulting rank-ordered lists of concepts rated as most essential, useful, and least essential by a panel of experts, the booklet provides: (1) suggestions and resources for using the concepts, including ideas for developing positive attitudes toward work and developing such job skills as locating and interviewing for a job, (2) descriptions of effective teaching techniques, such as role playing, student debates, and work experiences, (3) descriptions of projective and self-report techniques to use in assessing students' attitudes, and (4) an evaluation form to use in rating a present vocational program in terms of the concepts considered most important by the panel of experts. The questionnaire used in the research project plus lists of the panel of experts and teachers participating in the brainstorming session are appended. A report of the research project is available as VT 019 909 in this issue. (SB)

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TEACHING FOR EMPLOYABILITY

Patricia D. Murphy

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Teaching for Employability

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FOREWORD

This publication is the result of a research project entitled "Identification of Common Content in Courses Offered by Various Vocational Services at the Secondary Level" which was performed pursuant to a grant from the Research Coordinating Unit, North Dakota State Board for Vocational Education. Without the fine cooperation of vocational teachers, teacher educators, and workers the study could not have been done. Appreciation is extended to these people for their assistance in promoting the development of vocational education. Appreciation is also extended to Dr. Josephine B. Ruud for her editorial comments on the manuscript and to Rose Andersen for many of the ideas and examples included.

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Brief Summary of the Project

Vocational training is intended for all youth regardless of the size high school they attend. The problem of trying to make adequate vocational education available for all young people is a momentous task. In sparsely populated states such as North Dakota where vocational programs are offered only in a few schools the problems are multiplied. Few high school districts offer courses in all the vocational areas. Many high schools offer only one vocational program, often either agriculture or home economics and some high schools (in North Dakota) offer no courses in vocational education.

Students need a broader range of vocational skills than is presently being offered. More effective vocational training is needed. One way the needs of students could be met is by identifying content that is common to all vocational education areas and emphasizing these commonalities in the vocational training of youth. In schools where programs in vocational services are not available the commonalities or concepts that cut across vocational service areas could be stressed by any vocational teacher in the school.

If ideas common across vocational education were identified and taught to all high school students, the objectives of vocational education could more realistically be attained in rural areas. More students would receive more vocational education.

Procedures of the Study

Secondary teachers, teacher educators, and field practitioners from the vocational service areas of agriculture, distributive education, health, home economics, office education, trade and industry, and vocational counseling served on a panel of experts.¹ These 100 experts reacted to a list of concepts gleaned from a search of vocational literature. The final list consisted of 91 concepts drawn from curriculum materials, research reports, books and articles from the vocational service areas. The experts rated each item on the list as "essential," "useful," or "not important" to their vocational field at the secondary level.²

Persons from all the vocational services agreed as to the essentialness, usefulness, or lack of importance of 73 of the 91 items on the list (80.32 percent). When responses of the teachers, teacher educators, and workers across the various vocational service areas were compared there was agreement on 85 of the 91 items as important to vocational education at the secondary level. In other words, teachers from all the vocational service areas agreed, in general, with the teacher educators (from all the areas) and with the vocational workers on the essentialness or usefulness of the items. Items regarded as essential by all the vocational service areas represent the common core of content or the commonalities of vocational education.

¹ Participants on the panel of experts are listed in the appendix.
² The list with ratings made by experts is found in the appendix.

Results of the Study

The items were rank ordered on the basis of the degree of essentialness perceived by the experts. The top-ranked items are listed in Table 1. These items seem to represent "characteristics of the worker" and deal primarily with attitudes toward the world of work. Attitudes and self-understanding rather than job skills per se seem to be what is considered as essential at the secondary level.

Table 1.
Items Rated as Most Essential by Respondents

<i>Rank</i>	<i>Item</i>
1	Develop sense of responsibility (32) [*]
2	Develop work habits and attitudes necessary for individual maturing and job competence (28)
3	Develop an awareness of skills, knowledges, attitudes and personal qualities necessary in becoming a more employable person (30)
4	Accepting responsibility for one's own behavior (27)
5	Pride in work (25)
6	Attitudes toward the job (5)
7	Ability to follow directions (37)
8	Characteristics necessary for satisfactory relationships with people such as employer, employee, supervisors, customers (38)
9	Maintenance of good physical, mental and emotional health in relation to work (88)
10	Well-groomed look for work (90)
11	Develop communication skills (21)
12	Ability to plan and carry out plans (24)
13	Factors contributing to success on the job (77)
14	Understanding of what a customer expects, such as quality work and materials, honest answers, good service (41)
15	Develop problem-solving abilities (22)
16	Analysis of self in relation to demands of a job (26)
17	What do I have to offer to the job (62)
18	Job interview techniques (58)

* items ranked above the eightieth percentile

** item number on the questionnaire

The middle-ranked items are reported in Table 2. These are seen as basically essential in vocational education although some perceive the items as being useful rather than as essential.

Table 2
Items Ranked Between Twentieth and Eightieth Percentile
by Respondents

<i>Rank</i>	<i>Item</i>
19	Importance of personal health and physical fitness (9)
20	Ability to manage resources, time, money, energy (31)
21	Locating and applying for a job (57)
22	Understanding of one's values and their relationship to a job (29)
23	Exposure to career possibilities (6)
24	Evaluation of job performance by self, by supervisor (18)
25	Writing business letters, application letters, letters of inquiry (55)
26	Etiquette and behavior on the job (75)
27	Individual rights, privileges, responsibilities on the job (8)
28	How to prepare a personal data sheet (56)
29	Understanding of how people's personalities vary and affect their working with others (39)
30	Commitment to ethical behavior (36)
31	Care and maintenance of tools and equipment (87)
32	Maintain order in work (42)
33	Conserving materials and preventing waste (34)
34	Entry level skills (2)
35	Develop an attitude toward safety to apply in all situations (84)
36	How to request references of ability (60)
37	Emphasis on teaching job skills (1)
38	Coping with unexpected circumstances which may arise (23)
39	Respect for law and order (35)
40	Know good sanitary practices (85)
41	Future educational opportunities (7)
42	Functional competence in basic mathematical processes (20)
43	Formulation of vocational goals (43)
44	Managing personal finances (52)
45	Human relationships in family and employment situations (44)
46	Role of sound nutrition practices to good health, personal appearance and maximum production on the job (89)
47	Use of credit, credit rating, costs of credit (51)
48	Willingness to do routine work (33)
49	Available post-secondary job training opportunities (71)
50	Able to handle emergency situations (86)
51	Responsibility for establishing pleasant work climate (40)
52	Assume responsibility for assessment of basic reading skills (19)
53	Job-like simulated experiences in school (4)
54	Problems of adjustment to work (64)
55	Wages, hours, conditions of work, employee benefits (76)
56	Hiring policies of business firms (61)
57	Combining job and home responsibilities (45)
58	Employment agencies: public, private (63)
59	How to take pre-employment tests (59)
60	Know emergency first aid procedures (83)
61	Supervised work experience in the community (3)
62	Competencies needed by persons in different occupational classifications (72)
63	Job clusters: relationships between jobs, opportunity to transfer knowledge and skills from one area to another (70)
64	Functions and services of agencies in the credit field, i.e., banks, savings and loan, insurance companies (54)
65	Methods of terminating employment: employer, employee (17)
66	Interpreting job descriptions (69)
67	Understanding of career ladder opportunities (65)
68	Preparation for role as family member (47)

In Table 3 the lowest ranked items are listed. These were seen as least essential by the panel of experts. The items were viewed more often as useful rather than essential. The items most often rated as not important were those relating to the American economic system, types of businesses, and how businesses are run.

Table 3
Items Ranked as Least Essential by Respondents*

<i>Rank</i>	<i>Item</i>
69	Selecting goods and services (49)**
70	Appreciation of contribution of work in contemporary society (73)
71	Observation and study of occupations (68)
72	Understanding of advertising and its effects on consumers-workers (50)
73	Knowledge of employment trends (74)
74	Problems peculiar to women who work (46)
75	Summer, part time employment opportunities (66)
76	Insurance and liability (15)
77	Paycheck deductions (11)
78	Social security (14)
79	Consumer protection and information agencies (48)
80	Workman's compensation (16)
81	Federal and state wage and labor laws and regulations (10)
82	The American economic system (79)
83	Unemployment compensation and unemployment insurance (13)
84	Labor union functions, workers responsibilities, benefits (9)
85	Small town and big city living experiences (53)
86	Classification of occupations, e.g., professional, skilled, etc. (67)
87	Types of business organizations: individual, partnership, cooperation, cooperative, government (80)
88	How a business is set up and operated (81)
89	Business management compared to personal life management (82)
90	Principles of a free economic system compared to other economic systems (78)
91	How to complete federal and state income tax forms (12)

* Items ranked below the twentieth percentile

** Item number on questionnaire

In general the experts viewed all the items as pertaining to and important in vocational education. The experts agreed among themselves, irrespective of their vocational service area, as to the importance of the items. Also, teachers from all the vocational service areas agreed with teacher educators and workers as to the importance of items.

Use of the Common Concepts in the Classroom

Since the items represent ideas that were seen as essential by the panel of experts it seemed useful to ask vocational teachers to suggest ways they had used to teach these ideas. Topics discussed by the teachers during a one-day brainstorming session included developing positive attitudes, job skills, and appropriate appearance.³ These topics are described below. The list of suggestions is not complete by any means but is offered to stimulate ideas.

³ A list of the participants is found in the appendix

Developing Positive Attitudes

There is general support for teaching positive attitudes about the job and the world of work, and about one's self. A positive attitude toward work, the world of work, and toward one's self is crucial to success. An emphasis on the positive rather than the negative in what students do in your relations with them, and in their relationship with each other will help develop positive attitudes.

The teachers suggested giving a "Youth Award of the Month" to a member of the vocational youth organization for positive contributions made to the group, or a "Sunny" award to the student with the most positive attitudes toward the youth organization, toward the job, or toward school.

There is increasing evidence of the importance of positive feelings about the self in relation to work. When students feel negative about themselves and feel they have no worth they carry these attitudes to the job and as a result do not perform well. Some times it is necessary to try to develop more positive attitudes about the self before attacking job attitudes.*

Influence of Knowledge on Attitudes

Attitudes are developed and changed through a mixture of cognitive and affective experiences. Attitudes are learned, usually through an accumulation of experience. Information influences attitudes as does inaccurate information. For example, if students think vocational courses are only for the below average student, factual information regarding the number of young people entering the job market at, say, 18 (portrayed in an exciting way) may have an effect on their attitudes.

Knowing about a situation helps to alleviate anxieties and develop self-confidence and security. Knowing what the situation involves helps make people less fearful, nervous, and insecure.

Pride in Work

• Following are some suggestions from the teachers for helping develop the attitude, pride in work.

1. Teacher set example by exhibiting pride in his own work rather than demeaning his job.
2. Students respond to "List three things you did you were proud of," or "What about your project are you proud of?"
3. Involve students in planning, setting goals and ways of achieving and evaluating them. With the current focus on individualization, each student, with guidance, ought to be encouraged to select some of his own personal objectives. Students in youth organizations need to plan their own program of work, and evaluate it.
4. Provide work experiences to assist in developing pride in work. These experiences can be paid, non-paid, or volunteer; at home, school, or away from home; for parents, for a relative, or for an outside employer.
5. Have each student demonstrate a skill he learned on his job for the class. (Since the student has the job there are things he knows and can do better than his classmates. This is also useful in increasing student's estimation of themselves, particularly if classmates ask questions.)
6. "Success Story" from a recent graduate and/or drop out.

* See, for example, Cheryl G. Edie's study, "Attitude changes in girls enrolled in occupational home economics," Unpublished master's paper, North Dakota State University, 1968.

Employer Attitudes

Students need to begin to realize the importance of attitudes play in the work world. Positive attitudes help you in keeping your mind from getting ahead as well as in getting the initial job. Your students need to understand how attitudes permeate their whole being and influence their outlook. They also need to understand the employer's point of view regarding attitudes. Some ways to get started include:

1. Students survey employers on the most important qualities they desire in an employee. Students could tabulate the results and develop a check list from this to check their own employability.
2. Brainstorming session: What attitudes do you feel a person should have to get a job, to hold a job, to advance on the job?
3. Ask students what relationship they see between school attendance and work. Report results of Helling study. Students might repeat the Helling study or conduct a similar one. What evidence does a good attendance record at school provide an employer?

Sense of Responsibility

Another high ranked item dealing with attitudes was "Develop sense of responsibility." Suggestions from the teachers included:

1. Give students responsibility in increasing amounts, in the classroom, in youth organizations.
2. Have students write a job description of their job to help the next student who will have the job carry it out in a responsible manner.
3. Have each student think of a person he would consider "responsible." Describe that person, showing why he is considered responsible.
4. Or think of a person, a TV performer, or a movie actor or actress in a play who did not behave in a responsible manner. What responsible behavior was expected of him?
5. Assuming all students show responsibility in several ways (the positive approach) have each student choose one way in which he will strive to become more responsible. Have him keep a daily diary for a week indicating if he was or was not able to practice his goal that day.
6. Interview an employer about what he considers a responsible worker.
7. Discuss what responsibility of the worker is in situations a student might encounter on the job, as:
 - what to do if he breaks an inexpensive item
 - what to do if he breaks expensive equipment
 - how to behave the day the boss is away
 - how to care for equipment and supplies
 - etc.

Such a study has been done by North Dakota State University student of local employers. Students asked employers "What characteristics do you desire in a worker?" Responses were categorized as representing the cognitive, affective, or psychomotor area. A copy of the results may be obtained from Rose Andersen, Home Economics Education, NDSU.

An example of an Employability Checklist may also be found in Secretary's Office Handbook, Unit II.

In a recent study by Cliff E. Helling, *Career Development: An understanding, plan, and work packet for education K-12*, State of Minnesota, Department of Education, Vocational-Technical Division, St. Paul, 1972, to determine if secondary education is relevant to the work-oriented student entering the labor force, employers in trade and industry, office, distributive, and home economics-type jobs were interviewed. The school attendance record of the applicant was rated by employers as most important for entry-level jobs while work experience was rated as least important.

Job Skills

There were some common skills identified from the list as essential in vocational education. The teachers suggested including activities appropriate for teaching some of these key skills in the classroom setting or in vocational skills organizations.

Locating a Job

Suggestions made for the skills of locating a job included:

1. Search newspapers.
2. Advertise your own skills through a display or bulletin board (e.g. shop class will construct truck boxes, home economics class will baby sit).
3. Use multimedia for advertising available skills, such as slide sales by youth groups.

Interview Skills

Suggestions were also made by the teachers to assist in developing job interview techniques. Some of these suggestions lend themselves well to a team teaching approach, for example, the English teacher could cooperate with you.

1. Role play interviews. Use a tape recorder to record the interview, and then analyze the discourse.
2. Ask an employer or a representative from the employment service to speak to the class or youth group.
3. View film, *Three Young Women* (from State Vocational Department). At end of each interview, ask, "Would you hire this girl? Why? How many would not hire this girl? Why not?"
4. Have students write their qualifications for a certain job, including past work experience, appropriate hobbies, and other points about themselves. These could be handed in, then handed back for students to practice saying, either in small groups or for the class.
5. Ask several local employers (e.g., store, gas station, lawyer's office) if they would be willing to interview students for jobs in order to help students become familiar with procedures, gain self-confidence, and learn to "sell" themselves.

Communication Skills

Communication skills are important in vocational education. These skills can be developed in a variety of ways as suggested by the teachers.

1. Listen to students and encourage the development of their listening skills.
2. Assign short demonstrations to each student to develop their abilities to communicate through "showing and telling."
3. Experiment with the effects of body language. What do we communicate with gestures, facial expressions. A video tape recorder would be an excellent tool if available in your school.
4. Use socio drama or pantomime for students to practice communicating nonverbally.

Resource Material

Some helpful resource materials to use in this area include:

1. **How to Get and Hold the Right Job; Facts From Our Employment Service; Merchandising Your Job Talents; A Checklist to Prepare Yourself for a Job Interview;** pamphlets available from North Dakota Employment Service, Division of North Dakota Employment Security Bureau.

* An excellent listing of up-to-date and available films can be obtained from Department of Public Instruction, Division of Guidance Services, Capitol Building, Bismarck, ND 58501, and from State Board of Vocational Education, State Office Building, 900 East Boulevard, Bismarck, ND 58501.

2. **Preparing for an Interview**—filmstrip available from your local J. C. Penney manager (appropriate for both boys and girls).
3. **You and Your Job: What is it? Where is it? How to get it? How to Keep it? Where do you go from here?** (1968)—pamphlets available from J. C. Ferguson Publishing Company, 6 North Michigan Avenue, Chicago, Illinois 60602 (cost \$3.00 per set and \$2.95 for instructor's guide. These materials are developed especially for students with marginal reading skills.)
4. **Planning Ahead for the World of Work** (1971)—free pamphlet from The Center for Vocational Technical Education, the Ohio State University, 1900 Kenney Road, Columbus, Ohio 43210.

Appearance

Appearance for the job also appeared in the list of commonalities. Attitudes about appearance and its importance need to be stressed rather than the actual skills involved in maintaining appearance or grooming. Teachers made suggestions for ways to assist students.

1. Take a field trip to observe the appearance/dress of employees.
2. View film strips on appearance. (The World of Work series available from the State Vocational Office is recommended.)
3. Have an employer talk to the class with a question/answer period, or several employers serve on a panel.
4. Analyze case studies and situations. For example, an employer who stated emphatically, "I hired her because she was pretty." Soon it became evident that she was also frequently tardy, carelessly dressed, performed inadequately, "I hired her because she was pretty" . . . but I also fired her."
5. Survey or interview employers on the importance of appearance to them. Find out why dress/appearance is so important to employers. Does the kind of business make a difference? As a research project have the students develop the questionnaire/survey guide to use.
6. Have students demonstrate suitable and inappropriate dress and appearance for different kinds of jobs.
7. Put up a full length mirror in the hallway or in the classroom with the caption, "Would you hire me?" or "Do you like what you see?"
8. Have students construct a good grooming check list. In conjunction with job interviews, when each student has an interview ask the employer to complete the grooming check list. Role playing could also be used to develop this idea.
9. Set up a research study: Is there a relationship between good health habits and job attendance?
10. Ask a dental hygienist, school nurse, or public health nurse to speak to the class on health habits.

Teaching Techniques

The point was made repeatedly by the vocational teachers that how you teach is more important than what you teach. Descriptions of techniques for teaching found to be effective by the vocational teachers follow.

Role Playing

Role playing is a technique perceived by the teacher as extremely useful in developing attitudes and understandings in vocational education. Role play represents a simulation experience for vocational educators and students. It provides the opportunity to "try on" different roles and situations.

Role playing is a very effective teaching strategy for exploring human relations. Participants can analyze their own behavior without the punitive consequences likely to occur when real conflict is explored. One can enter into unfamiliar roles and by becoming conscious of values and their consequences modify them. Role playing can be an effective approach to several kinds of problems:⁹

- a) resolving conflict, especially, interpersonal conflict
- b) intergroup relations
- c) social values
- d) individual dilemmas.

According to the Shaftels, role playing activity consists of nine steps:¹⁰

1. warm up the group
2. select participants
3. prepare observers
4. set the stage
5. enact
6. discuss and evaluate
7. reenact
8. discuss and evaluate
9. share experiences and generalize

Some specific suggestions made by the teachers for use of role playing situations included:

- employer/employee act out ending to a situation and then actors reverse roles and do it again
- role playing situations
 - job interviews
 - appearance, appropriate dress
 - personal qualities, i.e., don't care attitude, not at work on time
 - dishonesty, distrust, uncooperative, emotional outburst, blow-up, tact, not dependable
 - personality
 - defeatist attitude
 - insubordination
 - disrespect
 - impatience
 - problems, i.e., losing job, alcoholism
- honesty/dishonesty

Manager discovered small change missing from cash register.

- This incident has occurred several times and the employer finally confronted the employee. How do you think this story might end?

Student Debates

Student debates can be used in many situations in ways similar to role playing. Controversial issues can be explored more meaningfully when one is assigned to represent a particular point of view even though it may not be the view held. This assists students in seeing issues through the eyes of another.

⁹ Bruce R. Joyce, Marsha Weil, and Rhonda Wald, *Three teaching strategies*, Science Research Associates, 1972

¹⁰ George and Fannie B. Shaftel, *Role playing the problem story*. National Conference of Christians and Jews, 1952

Some suggested topics for debate include:

1. Concept: What is success
Success is earning money
Success is a feeling of accomplishment in a job
2. Concept: dignity in work, all jobs are important

Hospital situation

The supervising nurse in charge is the most important person in the hospital.
A member of the housekeeping department is the most important person in the hospital.

Office education

The administrative head is the most important person.
The secretary is the most important.

Work Experiences

Teachers in vocational education can and do use work experiences as an effective teaching technique. Teachers must make decisions about real work experiences, simulated experiences, cooperative programs, or some combination of these for their programs. There are, of course, advantages and disadvantages to each. Some teachers feel that real work experiences are the only way to develop attitudes appropriate for the world of work. "There is nothing like the real thing," seems to be their motto. A real work situation is involved which cannot be duplicated in the classroom. Students are confronted with real on-the-job problems of working with others, problems of real customers, etc. In some situations the student earns money which is a financial benefit to the student. Some educators contend that real work experiences are motivating to the student.

There are also disadvantages to this approach. For one thing, it may be impossible to achieve in some small communities where the number and variety of work stations is limited. In many schools the cost of a coordinator is prohibitive. Adequate time is necessary to place students and to supervise them on the job. Often the students placed in job situations are those lacking in initiative and they are the ones who require closer supervision. Another disadvantage is that students placed in job situations often do not see the "right" practices. They may observe many poor practices. Also most work experiences are in entry level jobs. The student thus gets no experience or "feel" of managerial level or decision-making types of activities which can be accomplished in many simulated situations. Often one must wait a long time for a particular situation to occur in the real job setting whereas it can be "arranged" to occur by the teacher in a simulated setting.

Simulated experiences can include students shifting roles, some students can hold supervisory and managerial roles, students can be responsible for the production, selling, and/or distribution of products. The School Board dinner prepared by the occupational food service class, the restaurant or bakery established for a short period in the school, the school store operated by the distributive education students, and the shop production class making wooden toy trucks all represent simulation experiences that could be carried out.

Other Techniques

Extensive listings of techniques appropriate for the teaching of the concepts involved in the commonalities can be found in a variety of sources. A good source of ideas for teachers to assist in the development of attitudes is **Teaching for Changed Attitudes and Values** by Josephine Ruud.¹¹ Hatcher and Andrews have an extensive list of teaching techniques which are described in their book:¹²

¹¹ Josephine B. Ruud, *Teaching for changed attitudes and values*. Home Economics Education Association, 1201 - 16th St. N.W., Washington, D.C. 20036 (Price \$2.50).

¹² Hazel M. Hatcher and Mildred E. Andrews, *The teaching of home economics*. Houghton Mifflin, 1963, pp. 105-145.

discussion
buzz groups
brainstorming
circular response
panel
demonstration
role playing
skit - script

interviewing
anecdotes
jingle writing
questionnaire
interviews
forum
symposium
colloquy

question and answer
observation
pantomime
exhibition
visiting
committee grouping
game playing
check lists

Laboratory, lecture, resource people, and workshops are added to this list by others. Reference to the basic text(s) in your field may uncover additional techniques that you may wish to consider.

Techniques for Attitude Assessments

Evaluation of student learning is important in every area of education but such evaluation is more difficult in the area of attitudes. Measuring attitudes and measuring changes in attitudes represents a more complex task than measuring the acquisition of factual or cognitive information. There are, however, techniques that are accurate and appropriate for the task.

Attitudes have four dimensions to be considered.¹¹ First, attitudes have a directional dimension. One can be for or against something. For example, one can support or be opposed to "Adequate day care facilities should be a part of the fringe benefits of female workers."

A second dimension to attitude is intensity, i.e., how strongly or weakly you feel about it. For example, one student may feel very strongly about a union shop while another may not care one way or the other.

Attitudes may be public or private (the third dimension). One is usually more willing to make public those attitudes that conform to society's expectation. In our society at present many attitudes that formerly were mainly held privately have now become more public. For example, acceptance of women and blacks in leadership positions.

The fourth dimension of an attitude deals with its generality vs. specificity. Some attitudes have a global (general) dimension, i.e., all work has dignity or every man has a right to work. Attitudes may also be very specific, such as "I like Mr. Jones as an employer."

Keeping in mind the dimensions of attitudes can assist in effectively measuring attitudes. The techniques used to assess attitudes are of two major kinds: projective techniques and self-report techniques.

Projective Techniques

Projective techniques are those in which the student responds to an ambiguous or open stimulus. Type of projective techniques include:

- a. reaction to pictures, cartoons
- b. reaction to stories, articles, statements, case studies
- c. sentence or story completion
- d. spontaneous drama

The kinds of questions asked with these devices are open and permit a variety of responses.

¹¹ H. H. Remmers, *Introduction to opinion and attitudes measurements*. Harper, 1954.

For example:

1. What do you see in the picture?
2. How do you think the young woman feels?
The man?
3. Why might they feel this way?
or
1. What do you see in the picture?
2. Do you approve of what you see? Why?
3. What changes would you make if this were real life? Why?

When students are asked to give reason to support their choices they reflect their attitudes.

Students may also be asked to respond to verbal statements in the form of articles, stories, case studies, etc. In addition to asking questions about ways the persons involved might feel, students can be asked if they agree with the solution or conclusion and give reasons to support their choice. Again the stimulus materials are selected carefully. Situations where only one right answer is possible or permitted are not appropriate. Factual statements, such as "State and Federal child-labor laws allow teenagers to work at many kinds of jobs," are not very conducive to eliciting attitudinal responses. Statements that present positions on controversial issues are more apt to elicit emotional responses.

The following newspaper article (fictitious) represents an appropriate stimulus for eliciting attitudinal responses:

Washington, D.C.

Senator Foghound today announced that his bill S. 701 passed out of committee. Senator Foghound's bill would make compulsory completion of a least a one-year vocational training course after high school graduation by all young people (under age 21). Sen. Foghound maintains this will greatly lower the unemployment rate and provide all young people with a saleable skill.

Students can be asked such question as:

1. Do you agree with Senator Foghound?
2. How do you feel about his solution to the unemployment rate?
3. How would you feel about being compelled to take such a one-year course?

Students can also complete sentences (usually a series rather than one alone) or write endings for stories. Incomplete stories need to stop at a conflict or decision-making point. Then the student makes a decision and discusses the consequences. For example, complete the following story in the way you think it ought to end:

Joe works as a pharmacist assistant. He likes his job and needs the wages to pay his way in school. Several weeks ago Joe asked his employer for permission to have Friday night off to go to the big game at school. Mr. West said it was okay and Elmer could work in his place. On Friday at 4:30 Joe is preparing to leave when Mr. West says to him, "Joe, I know I said you could take the night off, but Elmer just called. He is sick. Will you stay?"

What should Joe do? How do you think Joe feels?
What might happen if he does as Mr. West asks? If he doesn't?
Do you think a situation like this could really happen?

Your best ideas for situations to use will come from your observations of and conversations with students and employers.

In spontaneous drama students act out the feelings and situations. A situation that is life-like is more effective in eliciting responses from students. The remarks made earlier about role playing apply.

Self-Report Techniques

Self-report techniques are the second major approach used in assessing attitudes. Self-report techniques are those in which the student rates himself or reports his feelings along specified dimensions. Some types of self-report techniques are:

- a. rank ordering
- b. rating scales
- c. questionnaires
- d. diaries and logs
- e. autobiographies

In a rank ordering device you ask students to put in order of importance to them up to ten or twelve phrases or statements. You usually do not use more than 10-12 statements because it is difficult to keep more statements in mind at one time. Rank orders get a priorities. Priorities are a reflection of attitudes held. You might construct such a device to measure attitudes about promptness, for example.

Directions: Put the following statements in order of their importance to you. Use the numeral 1 to indicate the statement of greatest importance to you, 2 to indicate the second most important, 3 for third, etc.

- My time is my own.
- One should always be on time for appointments.
- It is stylish to arrive a few minutes late.
- Part of being dependable is being prompt.
- Better late than never.
- If you are an important person you should keep others waiting at least a few minutes.

Rating scales are used for students to report their attitudes or feelings about a variety of things. Most college-level texts on measurement or evaluation have a section on rating scales that you may wish to review before constructing your own scales. Rating scales are very widely used. Students can be asked to rate statements along a numerical (i.e., 1 to 5) dimension, a verbal dimension (i.e., excellent, average, poor, or strongly agree to strongly disagree) or a combined numerical-verbal dimension. When scales are used to measure attitudes it is emphasized to the student that there are no right or wrong answers. What is wanted is an indication of belief. For example, the student is asked to choose among strongly agree, agree, undecided, disagree, and strongly disagree answers for each statement:

Industrial plants would ruin the scenic beauty of our plains and farmsteads.

Income from industry as well as farming and ranching would make our economy more stable and less subject to drastic fluctuations.

Diaries and logs kept by students are an effective self-reporting technique. The student records what is of concern to him or he may respond to several rather broad questions you structure. For example you might choose 2 or 3 of the following:

Weekly Log

Some things I did at (school) (work) this week
which were important to me were:

Why these were important to me:

Some things I did outside of (school) (work)

Some things I thought about

Some things I did this week to help me
understand people better

Some questions I have about

Autobiographies are another effective means for students self-report of attitudes or feelings. Students may be asked to write of a particular time period in their life or of a specific situation. For example, write about your first job; how did you get the job; what were your duties, etc.

Constructing Valid Assessment Devices

The principles involving validity and reliability are applied differently in the construction of attitude assessment instruments. For example, consider the following questions:

What do you think of persons when they are late?

Do you think people should be late?

(Look at picture of boy arriving late for work.) What are his thoughts?

What is the boss thinking?

People that are late...

When I am late I...

If you answer these yourself, you will find yourself responding to each one in a slightly different way. The second question can be answered yes or no and also has a socially acceptable response (in our society), and therefore does not encourage expression of a student's actual attitudes.

In relation to validity problems in assessing attitudes, the student is not always able to tell you what attitudes he holds for he may be unaware of them or they may be too painful to discuss. Persons are very suggestible when it comes to attitudes and also often want to appear to hold the attitudes the teacher, the employer, or the society views as acceptable.

In selecting or constructing devices to assess attitudes the certain characteristics of the stimulus need to be considered.

1. The stimulus may be disguised or undisguised. For example, you may ask the student the direct question, "How well do you like your supervisor," or you may disguise the stimulus (at least partially) and ask the student to role play a conflict situation between an employee and a supervisor.
2. The stimulus may be structured or unstructured. An example of a structured stimulus is "Do you think John should do this or that to solve his problems?" With an unstructured stimulus the student has greater freedom of choice in responding; for example, "Supply an ending to the story" (involving John in a problem).
3. The stimulus can also be hypothetical or real. Experiences of actual employers, employees, or students can be used or the teacher can invent situations.
4. The stimulus can be personalized or impersonalized. A personalized stimulus relates very closely to the student as a person, such as, "How do you feel, Robert, when your work supervisor examines your work?" An impersonalized stimulus can be an animal, or a hypothetical person, such as Charlie Brown, Snoopy, or Mighty Mouse.
5. Stimuli can be verbal or nonverbal. Verbal stimuli are those that are made up of words while nonverbal stimuli are those that use pictures, cartoons, or real objects rather than words to elicit reactions from students.
6. Stimuli may also be global or specific. Global stimuli tend to be broad and all encompassing, for example, How do you feel about women working? A more specific stimulus would be, How would you feel about having a woman as your supervisor?

Since it is psychologically threatening to reveal feelings, students may clam up or give irrelevant responses. Faking responses are frequent and students are very susceptible to suggestions from others. In order to increase validity and reliability in the assessment of attitudes it is necessary to decrease faking. This can be done by:

- a. using devices where the purpose is disguised
- b. avoiding self-report devices where socially accepted responses are obvious
- c. using non verbal materials to represent impersonal situations
- d. securing the trust of students
- e. avoiding strong statements about your own position or attitude.

Reducing suggestibility also increases the validity of assessment of attitudes. One can reduce suggestibility by using instructional responses; by avoiding true and false, and multiple choice statements, and by avoiding leading or loaded questions, such as "Is it wrong to cheat your employers?"

To decrease the psychological threat the stimulus should be hypothetical and impersonal. There should be no suggestion of punitive measures, that is responses are not graded or publically exposed and the teacher attempts to place each student in position of mutual trust.

Cautions in Interpreting Responses.

The responses the student gives are interpreted in terms of the teacher's knowledge of mental health and in terms of the student's best interests. The evaluation of attitudes must be based on multiple, continuous assessment not on the results of one instrument, one device, or one assessment. Use caution and avoid hasty overgeneralization. The validity of the interpretation needs to be questioned. Is the attitude really present in the response or is it merely the appearance of an attitude? Assessment of the consistency of the attitude, the degree of commitment, and degree of organization can assist in interpreting the student's responses. Be careful about reading more into a student's response than the student put there. The student responds within his frame of reference just as you, the reader, respond to the student's response within your frame of reference. Just as the student's perception is influenced by his own values and needs so your perception of his response is likewise influenced.

To illustrate, the following responses were made by students to the incomplete sentence:

If my co-worker did not do his share of the work on a particularly busy day I would . . .

Student A: . . . tell him off and then report him to the supervisor so I wouldn't get blamed cause the work is not done."

Student B: " . . . work faster so I could get part of his work done too or else try to cover the fact he hadn't done his."

Student C: " . . . wouldn't do nothing. It's no skin off my nose."

What interpretation would you make of each student's response? If this was the only indication of attitudes of responsibility related to the job you had from these three students you could, of course, come to no conclusions for you would not have enough evidence to reach any conclusions. If these responses are consistent with other assessments of these students' attitudes and your observations of them, what conclusions might you draw?

It seems you could reasonably conclude that Student A has a less positive attitude about getting along with his co-worker than Student B. It would, however, be unwarranted to conclude that Student A is a persistent troublemaker and will never amount to anything (an example of overgeneralization).

Suggested Assessment Techniques

In addition to the techniques suggested earlier some of the techniques used and found effective by the teachers are described below:

1. Students complete open ended sentences, such as:

I feel an employer should

I am proud of myself when

A responsible worker

What have you done that shows

self-control	efficiency
dependability	loyalty
initiative	carefulness
reliability	honesty
unselfishness	perseverance

2. Have students react to questions of the following type:

What feelings of accomplishment have you had in class this week?

What are your feelings on ... (

How have you shown (patience) in the last 24 hours? (or other word, perhaps from list in 1 above)

Make a list of three remarks or compliments which indicated ...

3. Have students react to specific job situations, i.e.

How do you feel when your co-worker takes a longer coffee break than is allowed?

How do you feel when ...

Evaluation of Common Concepts in My Program

Many ideas suggested by the teachers have been listed to assist in the development of the concepts identified as common and essential to vocational education. Vocational educators have a concern for students that is reflected in their programs. How does your program rate on the items considered as most essential by the panel of experts?

How are you helping your students prepare for the world of work? Does your course help instill self-confidence and feelings of security in your students? Does your course include "occupational relations," that is, emphasis on employer relations, attitudes toward work, getting and holding a job, and appearance for the world of work? Do you offer a broad vocational program preparing students for several occupations or several clusters or do you focus on one or on a very narrow range of jobs?

If there are areas of your program that you feel could be strengthened perhaps you can incorporate some of the concepts believed to be essential by the panel of experts in vocational education.

Amount of Emphasis: Rate each item as to the amount of emphasis you place on this aspect of the program.

Amount of Emphasis

Much Some Little

How Does My Program Rate?

Degree of Success: Rate each item on the degree of success you feel you achieve with your students in each area.

Degree of Success

Very Successful So-So Not Very Successful

Item

1. Develop sense of responsibility (32)
2. Develop work habits and attitudes necessary for individual maturing and job competence (28)
3. Develop an awareness of skills, knowledge, attitudes and personal qualities necessary in becoming a more employable person (30)
4. Accepting responsibility for one's own behavior (27)
5. Pride in work (25)
6. Attitudes toward the job (5)
7. Ability to follow directions (37)
8. Characteristics necessary for satisfactory relationships with people such as employer, employee, supervisor, customers (38)
9. Maintenance of good physical, mental and emotional health in relation to work (88)
10. Well-groomed look for work (90)
11. Develop communication skills (21)
12. Ability to plan and carry out plans (24)
13. Factors contributing to success on the job (77)
14. Understanding of what a customer expects, such as quality work and materials, honest answers, good service (41)
15. Develop problem-solving abilities (22)
16. Analysis of self in relation to demands of a job (26)
17. What do I have to offer to the job (62)
18. Job interview techniques (58)

APPENDIX

*Questionnaire used by Panel of Experts
with Their Ratings of the Importance of each Concept*

COMMONALITIES IN VOCATIONAL EDUCATION AT THE SECONDARY LEVEL

DIRECTIONS: Below is a list of items from all the vocational fields. The purpose of this study is to identify ideas that are common to more than one vocational area and that should be taught at the secondary level. Please react to each statement as to whether this idea should be taught in your vocational field at the high school level using the following scale:

- 1 - Essential in my field
- 2 - Useful to know in my field
- 3 - Not Important, not relevant, obsolete

	Essential	Useful	Not Important
	1	2	3
ELEMENTS OF EDUCATIONAL PROGRAMS			
1. Emphasis on teaching job skills	67	28	5
2. Entry level skills	63	35	2
3. Supervised work experience in the community	40	54	6
4. Job-like simulated experiences in the school	49	47	4
5. Attitudes toward the job	88	12	0
6. Exposure to career possibilities	67	33	0
7. Future educational opportunities	60	37	3
THE WORKER — BENEFITS AND OBLIGATIONS			
8. Individual rights, privileges, and responsibilities on the job	65	34	1
9. Labor union functions; workers responsibilities, benefits	14	71	15
10. Federal and state wage and labor laws and regulations	25	61	14
11. Paycheck deductions	28	60	12
12. How to complete federal and state income tax forms	16	64	20
13. Unemployment compensation and unemployment insurance	16	69	15
14. Social security	26	63	11
15. Insurance and liability	25	68	7
16. Workmen's compensation	20	69	11
17. Methods of terminating employment: employer, employee	39	53	8
18. Evaluation of job performance: by self, by supervisor	72	25	3
THE WORKER AS A PERSON			
19. Assume responsibility for assessment of basic reading skills	54	40	6
20. Functional competence in basic mathematical processes	64	31	5
21. Develop communication skills	81	18	1
22. Develop problem-solving abilities	74	25	1
23. Coping with unexpected circumstances which may arise	63	34	3
24. Ability to plan and carry out plans	79	20	1
25. Pride in work	91	8	1
26. Analysis of self in relation to demands of a job	74	25	1
27. Accepting responsibility for one's own behavior	89	11	0
28. Develop work habits and attitudes necessary for individual maturing and job competence	92	8	0

Numbers in the columns represent actual number of persons from the panel of 100 experts who checked that item

THE WORKER AS A PERSON (cont'd)

	Essential 1	Useful 2	Not Important 3
29. Understanding of one's values and their relationship to a job	70	29	1
30. Develop an awareness of skills, knowledges, attitudes and personal qualities necessary in becoming a more employable person	89	11	0
31. Ability to manage resources: time, money, energy	69	31	0
32. Develop sense of responsibility	92	8	0
33. Willingness to do routine work	64	30	6
34. Conserving materials and preventing waste	61	38	1
35. Respect for law and order	58	41	1
36. Commitment to ethical behavior	63	37	0
37. Ability to follow directions	88	12	0
38. Characteristic necessary for satisfactory relationships with people, such as employer, employee, supervisors, customers	85	15	0
39. Understanding of how people's personalities vary and affect their working with others	65	34	1
40. Responsibility for establishing pleasant work climate	50	47	3
41. Understanding of what a customer expects, such as quality work and materials, honest answers, good service	76	22	2
42. Maintain order in work	63	36	1
43. Formulation of vocational goals	62	34	4

THE WORKER AS A FAMILY MEMBER

44. Human relationships in family and employment situations	59	38	3
45. Combining job and home responsibilities	44	50	6
46. Problems peculiar to women who work	33	57	10
47. Preparation for role as a family member	36	57	10

THE WORKER AS A CONSUMER

48. Consumer protection and information agencies	21	70	9
49. Selecting goods and services	37	53	10
50. Understanding of advertising and its effects on consumers-workers	29	63	8
51. Use of credit, credit rating, costs of credit	63	32	5
52. Managing personal finances	58	40	2
53. Small town and big city living experiences	15	69	16
54. Functions and services of agencies in the credit field, i.e., banks, savings and loan, insurance companies	37	57	6

GETTING A JOB

55. How to prepare a personal data sheet	65	34	1
56. Writing business letters: application letters, letters of inquiry	67	32	1
57. Locating and applying for a job	68	32	0
58. Job interview techniques	72	28	0
59. How to take pre-employment tests	38	59	3
60. How to request references (of ability)	60	39	1
61. Hiring policies of business firms	33	67	0
62. What do I have to offer to the job?	72	28	0
63. Employment agencies: public, private	38	59	3

JOB INFORMATION

64. Problems of adjustment to work	40	59	1
65. Understanding of career-ladder opportunities	28	69	8
66. Summer/part time employment opportunities	28	64	8
67. Classification of occupations, e.g., professional, skilled, etc.	17	66	17
68. Observation and study of occupations	35	54	11
69. Interpreting job descriptions	40	51	9
70. Job clusters: relationships between jobs, opportunity to transfer knowledge and skills from one area to another	41	51	8
71. Available post-secondary job training opportunities: apprenticeship, adult education, vocational school, correspondence courses	53	45	2
72. Competencies needed by persons in different occupational classifications	42	51	7
73. Appreciation of contribution of work in contemporary society	29	64	7
74. Knowledge of employment trends	25	69	6
75. Etiquette and behavior on the job	69	29	2
76. Wages, hours, conditions of work, employee benefits	40	58	2
77. Factors contributing to success on the job	73	27	0

	Essential 1	Useful 2	Not Important 3
UNDERSTANDING OF ECONOMIC PRINCIPLES AND CONCEPTS			
78. Principles of a free economic system compared to other economic systems	18	61	21
79. The American economic system	26	55	19
80. Types of business organizations: individual, partnerships, corporation, cooperative, government	26	52	22
81. How a business is set up and operated	23	55	22
82. Business management compared to personal life management	18	61	21
SAFETY PRACTICES			
83. Know emergency first aid procedure	45	48	7
84. Develop an attitude toward safety to apply in all situations	66	30	4
85. Know good sanitary practices	63	33	4
86. Able to handle emergency situations	52	45	3
87. Care and maintenance of tools and equipment	65	33	2
GROOMING/PHYSICAL FITNESS			
88. Maintenance of good physical, mental and emotional health in relation to work	81	19	0
89. Role of sound nutrition practices to good health, personal appearance, and maximum production on the job	63	32	5
90. Well-groomed look for work	81	19	0
91. Importance of personal health and physical fitness	72	27	1

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